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E. GILLISSE

2,294,173

ASH RECEIVER

Filed April 26, 1939

2 Sheets-Sheet 1

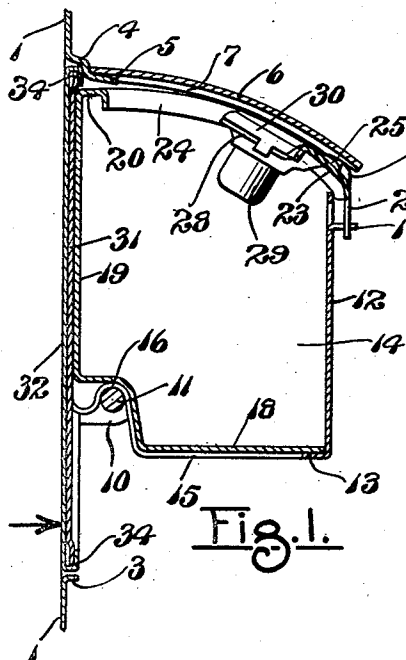


Fig. 1.

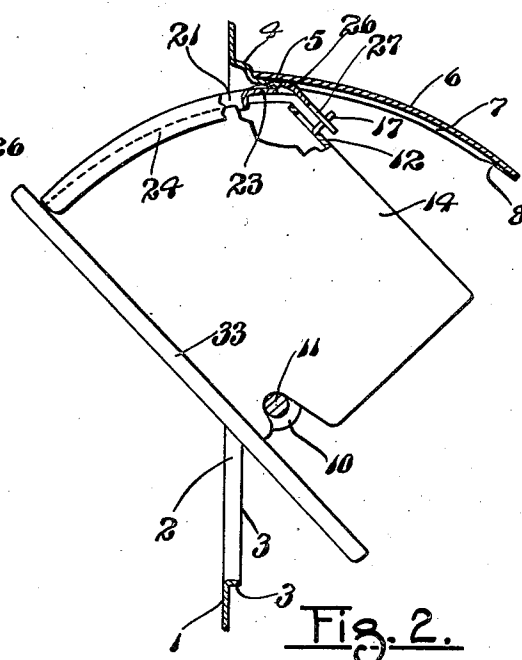


Fig. 2.

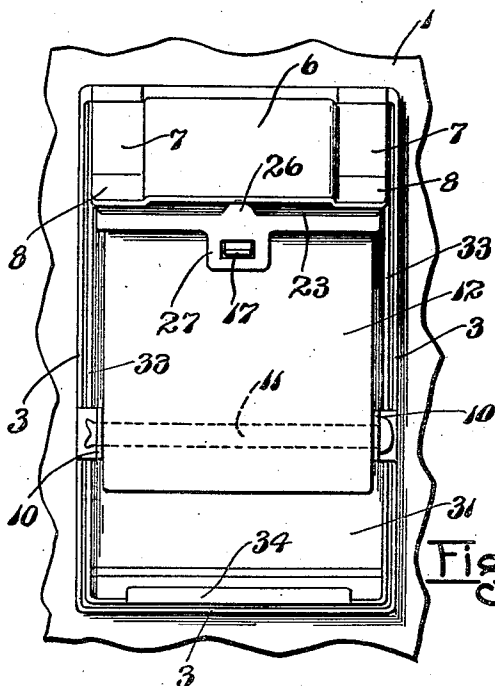


Fig. 3.

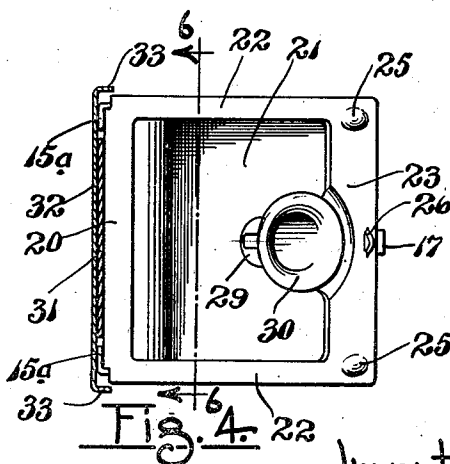


Fig. 4.

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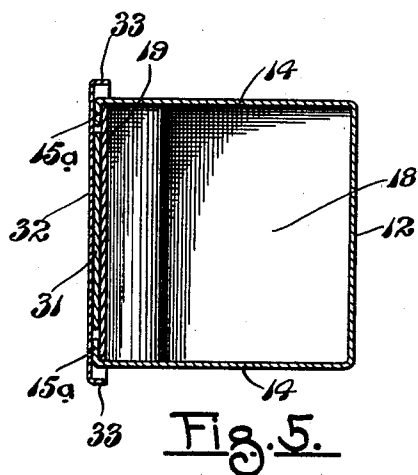


Fig. 5.

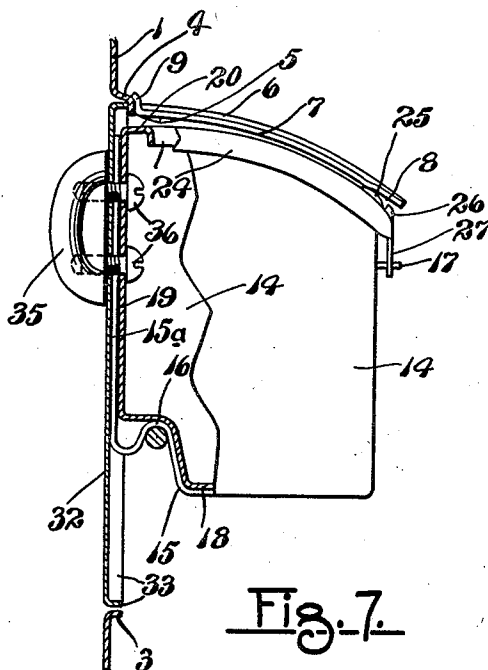


Fig. 7.

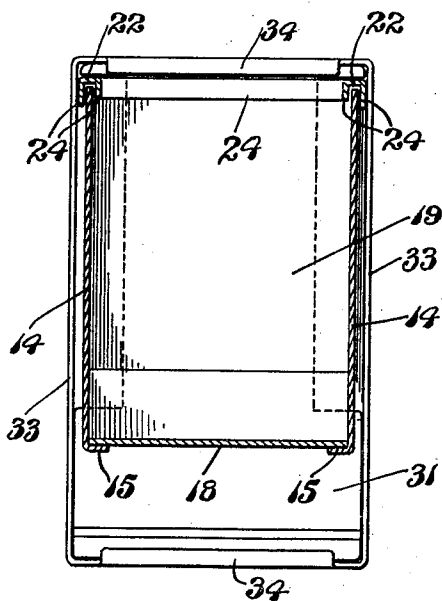


Fig. 6.

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ASH RECEIVER

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Application April 26, 1939, Serial No. 270,061

6 Claims. (Cl. 206—19.5)

This invention is concerned with a novel construction of ash receiver adapted to be detachably mounted usually upon the dash of a motor vehicle. It is a primary object and purpose of the invention to produce an economical, readily operated ash receiver of a very simple and practical construction, and one which can be manufactured at low cost, very readily inserted in or removed from an opening either in a mounting plate attached to the dash of the motor vehicle, or in an opening directly in the dash itself, the ash receiver being tiltable outward for the reception of ashes and the like and normally held from disengagement and insured against accidental disengagement, yet at the same time being very easily operated to permit its removal for dumping ashes or other refuse which has been deposited in the receiver.

An understanding of the invention may be had from the following description, taken in connection with the accompanying drawings, in which:

Fig. 1 is a vertical section from front to rear with the ash receiver in closed position.

Fig. 2 is a partial vertical section and side elevation showing the ash receiver tilted to outer position.

Fig. 3 is a rear elevation of the ash receiver structure shown in Fig. 1.

Fig. 4 is a plan view of the tiltable ash receiver, the front portion thereof being in horizontal section.

Fig. 5 is a horizontal section between the upper and lower ends of the tiltable ash receiver.

Fig. 6 is a vertical section substantially on the plane of line 6—6 of Fig. 4, looking in the direction indicated by the arrows, and

Fig. 7 is a partial side elevation and vertical section showing a slight modification in structure.

Like reference characters refer to like parts in the different figures of the drawings.

The supporting or mounting plate 1 upon which the tiltable ash receiving member is mounted is of sheet metal, and may be the vertical dash of a motor vehicle or a separate vertically positioned plate of sheet metal adapted to be attached to the dash or other convenient support. In the mounting plate 1 a rectangular opening 2 is cut, the metal being pressed inwardly to provide flanges 3 at the bottom and vertical sides of the opening, while at the upper end of the opening the metal is pressed inwardly for a distance as indicated at 4, thence bent downwardly for a short distance and thereafter extending inwardly in a flange 5, which is cut

away at each end so that it is of less length than the width of the opening 2.

At the upper end of the opening 2 and extending rearwardly from the flange 5 is a curved plate which has a slightly elevated intermediate section 6 with integral downwardly pressed sections 7, one at each side thereof. The forward end of the intermediate raised section 6 passes over the flange 5 and is spot welded thereto, while the under side of the flange 5 and of the sections 7 are substantially flush with each other. At their outer free end portions the sections 7 are raised as indicated at 8, nearly to the plane of the intermediate elevated portion 6. The forward ends of the lower sections 7 are turned upwardly as at 9 (Fig. 7) to bear against the shoulder which connects the two parts 4 and 5. A distance above the lower end of the opening 2, approximating one-third of the height of the opening, ears 10 extend backwardly from the vertical border flanges 3 around said opening 2, and are off-set inwardly as shown, through which a horizontal rod 11 extends and upon which the rod is supported.

The ash receiving member which is tiltable mounted on the rod is made from two pieces of sheet metal. From one piece of sheet metal a vertical back 12 is provided, at its lower edge having an inturned flange 13 (Fig. 1). Sides 14 are bent from the back 12 at its opposite vertical edges and forward at right angles to the back. Said sides 14 at their lower edges are provided with inturned flanges 15 which, as best shown in Figs. 1 and 7, toward their fronts extend upwardly and are then curved into sockets 16 open at their under sides, the flanges then being reversely curved and extending vertically upward, at 15a, being turned inwardly from the forward edges of the sides 14 of the ash receptacle. Near the upper end of the back 12 and preferably midway between its side edges a tongue 17 is struck from the metal and turned to the rear. Of course this tongue may be made from a separate piece of metal spot-welded or otherwise secured to the back 12 to be in effect integral therewith.

From the other piece of metal used in constructing the tiltable receiver, a bottom 18 is provided which lies over the flanges 13 and 15 and thence extends upwardly over the sockets 16, and is then turned upwardly to provide a vertical front 19. The bottom 18 and the front 19 come against the flanges 13, 15 and 15a and are permanently secured by spot-welding, sol-

dering, brazing, or in any other equivalent manner.

At the upper end of the front 19, the metal is turned rearwardly as at 20 and extends over the upper end of the receptacle, but has the intermediate and major portion of it cut away to provide an opening 21 (Fig. 4) which is bounded at its front edge by the part shown at 20 in Fig. 4, at its sides by side members 22, and at the rear by the cross member 23. The metal is turned downwardly around said opening to make the surrounding downwardly extending flanges 24; and the sides 22 at their outer edges are likewise turned downwardly to make like flanges 24, thus strengthening and reinforcing the sides. The back bar portion 23 has two raised and rounded knobs 25 which are positioned to ride frictionally against the under sides of the sections 7 of the sheet metal covering member previously described. Between the ends of the back cross bar 23 a stop lug is struck upwardly, adapted to come against the rear edge of the flange 5 when the receptacle is tilted outwardly, as in Fig. 2. At the rear edge of bar 23 an extension ear 27 is bent downwardly and has a rectangular opening through which the tongue 17 on the back 12 passes. The upper member of the receptacle in which the opening 21 is made, which opening is surrounded by the sides 22 and the front and rear bars 20 and 23, normally tends to move in an upward direction by inherent tension in said member until the tongue 17 interposes as a stop when it comes to the lower side of the rectangular opening in the part 27, the opening being wider than the thickness of the tongue.

A forwardly off-set ear 28 extends from the rear bar portion 23 into the opening 21 and carries a snuffer 29 passed downwardly there-through, the upper end of which is outwardly flanged as at 30, covering and bearing against the ear 28. A downward pressure upon the flange 30 presses the top open frame downwardly whereby with the ash receiver tilted to the forward position shown in Fig. 2, the stop 26 will be depressed below the level of the flange 5 whereupon the ash receiver may be easily removed.

A flat plate 31 of sheet metal, in the structure shown in Figs. 1 to 6 inclusive, is located against the front side of the front 19 of the ash receptacle, being spot-welded thereto. It is covered by an ornamental front cover plate 32 which has rearwardly turned edge flanges 33, those at the upper and lower ends being extended and turned upwardly as at 34 to clamp the front plate upon the plate 31. The plates 31 and 32 are of such size as to substantially fill the opening 2 in the mounting plate 1.

The ash receiver is mounted for tilting movement upon the rod 11 by extending the lower portions of the plates 31 and 32 through the opening 2 until said rod seats in the sockets at 16. Then by pushing inwardly at the front against the upper end of the ash receptacle, the stop 26 will be carried underneath flange 5, whereupon the receptacle may be turned to closed position, as in Fig. 1, wherein the upper securing flange 34 engages against the shoulder between the two parts 4 and 5. The receptacle may be tilted to the outer position shown in Fig. 2 by pressing inwardly against the lower portion of the outside cover plate 32, as indicated by the arrow in Fig. 1. The receptacle will tilt to the position shown in Fig. 2, being stopped when the stop 26 comes against the edge of the flange 5. To remove the

receptacle it is necessary merely to press downwardly upon the upper flange 30 of the snuffer and thus lower the stop 26 so that it may pass underneath the flange 5. The knobs at 25 bear frictionally against the under sides of the side sections 7 of the overhead cover, which overhead cover is of a shape that it has a tendency to spring downward and ride upon said knobs. This frictional engagement continues until the knobs reach the shallow recesses which are provided at the outer ends of the sections 7 at the points indicated at 8, whereupon the knobs enter said recesses and act to hold the receiver receptacle in its closed position so that it will not tilt outwardly accidentally or under the jar and vibration of the automobile, but will readily tilt upon the application of a pushing force against the lower end of the cover plate 32, as previously described.

The receptacle may also be opened by grasping a handle or knob 35, as in Fig. 7, which is secured at the outer side and upper portion of the front cover plate 32, as by screws shown at 36. With such construction the plate 31 may be eliminated and the front plate spot-welded directly to the flanges 15a, said plate 31 being used in the previously described structure shown in Fig. 1, where no knob 35 is provided, in order to reinforce the plate 32 at its lower portion to sustain the pressure force applied to tilt the ash receptacle to open position.

The construction described is economical to produce, easy to operate both in tilting to open or closed position, is very quickly and readily removed and replaced. It is of an attractive design and in those cases where the opening knob or handle 35 is not used, presents an outer surface flush with the mounting plate or dash upon which it is carried. The structure has proved very useful, practical and successful in commercial production.

The invention is defined in the appended claims and is to be considered comprehensive of all forms of structure coming within their scope.

I claim:

1. A vertically positioned mounting plate having a rectangular opening therethrough and having a flange with a shoulder extending inwardly at the upper side of the opening, a downwardly and inwardly curved plate connected with said flange, a horizontal rod carried by said plate back and above the lower end of said opening, a receptacle open at its upper end tiltably mounted upon said rod whereby it may be moved outwardly to bring the open end of the receptacle in front of the mounting plate, a front plate attached to said receptacle adapted to substantially fill the opening in the mounting plate and having a lower depending portion extending below the rod and the lower end of the receptacle, and having its upper end adapted to engage against the shoulder of said flange, and a resilient member secured at its front end to the front of the receptacle and extending over the open upper end thereof, and at its rear end being provided with an upwardly extending stop adapted to engage with said flange on outward tilting of the receptacle to a predetermined position.

2. A construction containing the elements in combination defined in claim 1, said resilient member at its rear portion having a downwardly extending ear with an opening therethrough, and said receptacle having a member extending from the rear thereof passing through said opening, the opening being of greater vertical height than the vertical dimension of said projection.

3. An ash receiving receptacle comprising, a vertical mounting plate having an opening there-through, a receptacle mounted in said opening to tilt outwardly at its upper portion and to be turned rearwardly to a vertical position, a front plate attached to said receptacle substantially filling the opening, said receptacle being open at its upper end, a resilient member attached at its front edge to the front part of the receptacle extending over the upper end of said receptacle, said resilient member being in the form of an open frame having spaced sides and spaced front and rear cross members, a stop member extending inwardly from the mounting plate at the upper end of the opening therein, and a cooperating stop member on the rear cross member of said resilient member adapted to engage against the first stop member on tilting the receptacle outwardly to a predetermined position.

4. A construction containing the elements in combination defined in claim 3, combined with interengaging means upon said resilient member and the receptacle holding the free inner bar portion of said resilient member against movement away from the receptacle beyond a predetermined position and permitting movement under pressure of the free inner portion of said resilient member in a direction toward the upper end of the receptacle, as specified.

5. A construction containing the elements in combination defined in claim 3, said side members of the said resilient member being of inverted channel cross sectional form having an

upper web and depending legs, the upper edges of the sides of the receptacle being received between the legs of said channel-like parts.

6. A mounting plate having a rectangular opening therein, a horizontal rod mounted on said plate back of said opening and a distance below the upper end thereof, an ash receiving receptacle open at its upper end tiltably and removably mounted upon said rod for outward tilting movement to bring the open end of the receptacle in front of the mounting plate, a stop carried by said mounting plate above the open end of the receptacle, an inwardly extending cover plate attached to the mounting plate lying over the open upper end of the receptacle when it is at inner vertical position, a resilient member connected at its front end to the front portion of the receptacle and lying over the upper end of said receptacle, said resilient member having a cooperating stop adapted to normally engage with the first mentioned stop on tilting the receptacle outward to a predetermined position, but being movable downwardly so as to pass underneath the first mentioned stop on resiliently pressing the rear end of said resilient member in a direction toward the receptacle, and bearing projections on said resilient member adapted to frictionally bear against the under side of said covering plate, said covering plate at its inner portion and under side having recesses adapted to receive said bearing projections when the receptacle is at its inner vertical position.

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